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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,303	12/30/1999	GILBERT WOLRICH	10559/133001	7635

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EXAMINER

HUNT, ERIC T

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 08/26/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/476,303

Applicant(s)

WOLRICH ET AL.

Examiner

Eric T. Hunt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1: ☐ Certified copies of the priority documents have been received.
- 2: ☐ Certified copies of the priority documents have been received in Application No. _____
- 3: ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-18, drawn to a method for receiving data from a plurality of ports for processing by a plurality of processes, comprising assigning ports, notification, selecting ports re-assigning ports, transfer of data from ports to processes, port-to –thread assignment, assignment list, packet data, Ethernet port, classified in class 709, subclass 250.
 - II. Claim 19, drawn to A processor comprising a microengine, thread particulars, a bus interface, classified in class 709, subclass 102.
2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it is usable in a method for receiving data from a plurality of ports for processing by a plurality of processes, comprising assigning ports, notification, selecting ports re-assigning ports, transfer of data from ports to processes, port-to –thread assignment, assignment list, packet data, Ethernet port classified in class 709, subclass 250. The subcombination has separate utility such as it is usable as processor comprising a microengine, thread particulars, a bus interface, classified in class 709, subclass 102.

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3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Scott Harris on 08/19/2002 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claim 19 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6 and 7 recite the limitation "the port-to-thread" in claim 1. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the port-to-thread" is interpreted to be "port-to-process". Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined

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was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1-7 and 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,012,151 to Mano.

9. Regarding claim 1, Mano teaches a method for receiving data from a plurality of ports for processing by a plurality of processes, comprising:

assigning one of the plurality of ports [**Mano column 3, lines 48-50**] to one of the plurality of processes [**Mano column 3, lines 10-12 & 25-27**];

determining that additional data is available from the assigned port [**Mano column 3, lines 50-51 & 40-42**]; and

awaiting notification by the one of the plurality of processes that processing has been completed [**Mano column 9, lines 12-17 completion of installation & file update**] prior to re-assigning the port to one of the plurality of processes [**Mano column 10, lines 20-22 when installed**].

10. Regarding claim 2, Mano teaches the invention substantially as claimed as noted above. Mano further teaches

determining if data is available from one of the plurality of ports [**Mano column 3, lines 40-42 & 50-51 active processor in correspondence table is equivalent to available data**].

11. Regarding claim 3, Mano teaches the invention substantially as claimed as noted above. Mano further teaches

selecting one of the plurality of processes [**Mano column 19, lines 50-52**].

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12. Regarding claim 4, Mano teaches the invention substantially as claimed as noted above.

Mano further teaches

directing transfer of the data from the assigned port [**Mano column 15, lines 25-27**] to the one of the plurality of processes for processing [**Mano column 15, lines 28-31 & column 16, lines 5-7 highways correspond to ports**].

13. Regarding claim 5, Mano teaches the invention substantially as claimed as noted above.

Mano further teaches selecting comprises:

determining if any of the plurality of processes is available to process the data [**Mano column 17, lines 7-10**]; and if it is determined that one of the plurality of processes is available to process the data [**Mano column 17, lines 12-17**], choosing an available one of the plurality of processes.[**Mano column 17, lines 24-28**]

14. Regarding claim 6, Mano teaches the invention substantially as claimed as noted above.

Mano further teaches

recording the port-to-process assignment on an assignment list [**Mano column 3, lines 40-42 & figure 5a correspondence table, plurality of ports and pairs of active and standby processors**].

15. Regarding claim 7, Mano teaches the invention substantially as claimed as noted above.

Mano further teaches

removing the port-to-process assignment from the assignment list upon receiving notification that the processing has been completed [**Mano column 6, lines 59-62 & column 11, lines 37-41 monitors status and maintains correspondence table status change**].

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16. Claims 13-18 are apparatus claims corresponding to the method claimed in claims 1-7; therefore claims 13-18 are rejected under the same rationale.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,012,151 to Mano as applied to claims 1-7 above, and further in view of U.S. Patent No. 6,393,483 to Latif.

19. Regarding claim 8, Mano teaches the invention substantially as claimed as noted above. Mano does not teach wherein the data comprises packet data. However, in art related to reassignment of receive tasks for a plurality of ports, Latif teaches transmitting packet data from a plurality of ports [**Latif column 6, lines 20-23**]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Mano with the multiport NIC receiving means because it provides increased load balancing capability.

20. Regarding claim 9, Mano & Latif teach the invention substantially as claimed as noted above. Mano & Latif further teach wherein the packet data comprises a network packet [**Latif column 6, lines 20-23 & column 9, lines 7-9 packet data transmitted to/from NIC**].

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21. Regarding claim 10, Mano & Latif teach the invention substantially as claimed as noted above. Mano & Latif further teach wherein the packet data comprises a predetermined portion of a network packet **[Latif column 6, lines 43-45 MAC address appended to packet]**.

22. Regarding claim 11, Mano & Latif teach the invention substantially as claimed as noted above. Mano & Latif further teach wherein the network packet comprises an Ethernet packet **[Latif column 6, lines 18-19]**.

23. Regarding claim 12, Mano & Latif teach the invention substantially as claimed as noted above. Mano & Latif further teach wherein the one of the plurality of ports comprises a 10/100 BaseT Ethernet port **[Latif column 5, lines 21-22 & column 1, lines 61-63 bandwidth corresponds to 10/100 BaseT Ethernet]**.

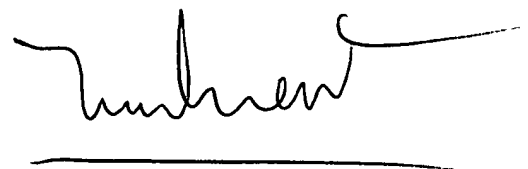
Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric T. Hunt whose telephone number is 703-305-4868. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

E.H.
August 19, 2002



LE HIEN LUU
PRIMARY EXAMINER